

After five tours of duty in Iraq and Afghanistan, Sean Lane thought he found a safer, more vital battlefield.

The decorated U.S. Air Force intelligence officer designed hardware and software for a portable cellular network for the military and parlayed that into a successful software business in Baltimore.

He then turned his zeal and discipline to the broken U.S. healthcare system.

To an entrepreneur with world-changing ambition, the problem was irresistible: massive, intricate and with life-or-death stakes.

A compelling public speaker hailed as a visionary, Lane sold his vision to venture capitalists who poured more than \$850 million - the vast majority since 2020 - into Columbus unicorn Olive AI Inc.

"We need to cure this system, and we need to do it now," says the narrator in the *Meet Olive* video on YouTube. "Well, my friends, we are the ones. And Olive is who we will unleash on the darkness."

The company made robotic process automation software for hospital billing and administrative tasks.

"Olive is not an administrative assistant. It is a thing that can shift \$1 trillion in cost to things that matter," Lane told *Columbus Business First* in 2018.

That's about one-fourth of all U.S. healthcare expenditures. Olive aimed to grow massive by netting a fraction of the savings.

"The good thing is I knew it was going to be really, really hard," Lane said then.

"It pales in comparison to five combat tours and fighting the Taliban."



RECOMMENDED

Sean Lane, founder and CEO of Olive Al Inc.

DAN TRITTSCHUH | FOR CBF

Lane's LinkedIn profile photo shows him in Air Force tactical gear, holding a rifle. His video backdrop often was camouflage netting, combat boots on a corner table.

His online bio in social media and a personal blog says only, "I'm going for it ..."

Now Olive is gone.

Not Holmes or Neumann

The company peaked at 1,400 employees nationwide in early 2022, a sevenfold increase over two years. But that July, it started a series of cutbacks and divestitures.

Then Olive's website announced on Oct. 31 that the company had sold remaining business lines for undisclosed amounts to two buyers and would liquidate.

"The company had hoped to complete one or more transactions and secure funds and business to prevent the closing of the business, but was unable to do so," said Olive's WARN filing with the Ohio Department of Job and Family Services on terminating the last 115 employees.

Olive's website redirects to one of the acquirers, Louisville-based Waystar, which filed for an IPO in October.

Lane has not responded to email or LinkedIn messages. Drive Capital, Olive's first investor when it was CrossChx Inc., declined to comment.

Olive's rapid ballooning and deflation drew comparisons online to Elizabeth Holmes of Theranos and WeWork's Adam Neumann - charismatic figures who raised huge sums for societal transformation that was never delivered. Unlike the Holmes case, no allegations of fraud have surfaced.

Colleagues and vendors, most asking not to be named, told *Business First* that Lane's urgent desire to improve patient safety and health was genuine. But in aiming for multibillion-dollar size and status, he pushed to change too much at once – with tech that hadn't caught up to the promise – and grossly underestimated how long it would take.

"Sean has the right vision. It has to be practical," said Derek Foster, founder and CEO of Etyon Inc., which co-sold software with Olive on some clients. "He tried to put the right technology and partnerships together to accomplish that vision.

"It's time and money."

Venture Capital shifts

Vinod Khosla, whose Khosla Ventures in 2015 was the company's first Silicon Valley investor, advised Lane to aim for "something massive," Lane has said in speeches.

"Sean is the definition of a world-class entrepreneur. He's just unwilling to settle for a business that's 'good enough,'" Drive co-founder and Partner Chris Olsen said in 2018. "His conviction and his ability - and his team's - to continue to go after the massive outcome and the massive impact is what has investors excited."

Since its first \$5 million investment in 2013, Drive led or joined at least five more rounds, including the 2018 bridge loan to facilitate the transition to the Olive bot from legacy CrossChx products.

The vast majority of Olive's backing came in 2020 and 2021 - including funds from firms in Silicon Valley, New York City and Boston.

RAISING FUNDS

Olive raised a cumulative \$857 million in venture capital through 2021. The company, founded in 2012 and launched more broadly in 2013, abruptly shut down Oct. 31 this year after failing to raise more.

Year	DBA	Round	Lead VC	Other investors
2013	CrossChx	\$5M	Drive Capital	
2015	CrossChx	\$15.1M	Khosla Ventures, Drive Capital	
2016	CrossChx	\$15.5M	Silicon Valley Bank, Khosla Ventures, Drive Capital, NCT Ventures, Moonshots Capital	
2017	CrossChx	\$5M	Drive Capital	
2018	Olive	\$32.8M	Oak HC/FT, Ascension Ventures	
Mar-20	Olive	\$52M	General Catalyst	
Sep-20	Olive	\$106M	General Catalyst, Drive Capital	Ascension Ventures, Oak HC/FT, SVB Capital
Dec-20	Olive	\$225.5M	Tiger Global	Drive Capital, General Catalyst, SVB, GV, Sequoia Capital Global Equities, Dragoneer Investment Group, Transformation Capital Partners

Nationwide, tech investment soared in 2021. Interest rates had been near zero for years and nontraditional limited partners entered the investment class.

"This was very much a growth-at-all-costs mindset," said Vincent Harrison, VC research analyst for PitchBook. "Capital was falling from the sky."

But the more capital a company takes on, the more expectation investors have of tenfold or more returns.

Olive's \$400 million round in July 2021 valued the company at \$4 billion, both shattering Ohio records.

"That immediately raises a lot of bells for me," said Emily Evans, managing director specializing in health policy at Nashville market research firm Hedgeye Risk Management LLC. "You have to deliver on that to your investors. (Healthcare is) a highly regulated industry and it's also a very cautious industry."

After the 2021 mega-round, in his last interview with *Business First*, Lane said he chose "long-haul" investors who exerted "zero pressure" on returns.

Hedgeye Risk Management researches stocks and monitors private markets for potential IPOs. Evans, a panelist in a 2021 future-of-healthcare conference, watched the keynote by Lane - wearing his signature ball cap emblazoned with "HUMAN" to distinguish from the Olive bot.

"This is not somebody who knows much about healthcare, the way he talked about it," Evans said. "He may understand technology, but he doesn't understand this industry. The ramp he was describing was probably very appealing if you're a venture capitalist in Silicon Valley.

"To the extent Olive might have sold something, they didn't deliver - otherwise they'd still be in business."



Olive's downtown office included murals designed to motivate employees.

Olive's origin story

CARRIE GHOSE

As Lane sold Baltimore-based BTS Software in 2011, the opioid crisis was taking its toll, he has said in multiple talks and interviews. He went to funerals for friends and family in his hometown of Gallipolis in Southeast Ohio.

Lane embedded with local Holzer Health System and observed disjointed patient records and business processes. There was no way to tell if someone was doctor-shopping for prescriptions, for example.

"Healthcare lacks the internet," he often said. Instead of digital routers for information, he said, there were overburdened people doing "administrative scutwork,"

"That's true, but there's also a reason for that," Evans said. "People die if you get it wrong."

Lane started CrossChx in 2012 to build "the internet of healthcare," which remained the core thesis when the company sold its entire product line and rebranded as Olive five years ago.

Starting in late 2020, Olive used VC proceeds to make key hires and acquisitions, expanding into cybernetics, prior authorization, population health and analytics for surgical improvement.

Lane raised an additional \$50 million to found Circulo Health, using Olive's tech to design a Medicaid health plan. Circulo pivoted away from insurance after 17 months and in March merged with a residential disability care company owned by Lane's father.

"If you're going to deliver growth in an exponential way to venture, the last place you want to be is Medicaid managed care," Evans said. "It is a hard, hard slog through state contracts and very onerous."

Lane spent long flights sketching out Olive capabilities, he told *Business First* during the pandemic. Working from home, he'd sit in his car to do the same.

MEGA-BUCKS

Olive raised more VC than any health IT company in the country, according to PitchBook. In its category for hospital revenue cycle management software, all investment has fallen off sharply from a 2021 peak.

Total revenue cycle VC deals /

Olive as part of that total

2020

\$608M

\$383.5M

2021

\$1,376.9M

\$400M

2022

\$407.3M

2023 through June

\$190.1M

Source: PltchBook

A single tech company was unlikely to bring about \$1 trillion in savings, Evans said.

"This is a highly regulated, slow-moving industry that is controlled on the technology side by a very small number of players," Evans said. "It's just so, so difficult. I wish it wasn't."

Epic Systems electronic medical records are used in half of U.S. hospital beds, and hospitals representing one-fourth of beds use Oracle Cerner records, according to Klas Research. Other health IT giants include Veradigm (formerly Allscripts). Insurers also run tech arms. Competing algorithms seek to get insurance claims paid – or reject them.

"It's a battle of the machines," Evans said.

In 2016, Lane said 1980s-era systems such as Epic, which (mostly) replaced paper, would themselves be replaced by nimble, modular software.

Health IT startups still remain on the periphery of Epic and other giants, "solving narrow, specific problems," Foster of Etyon said.

"Progression is going to take time," he said.

Foster founded Etyon in Milwaukee in 2014 after a decade in healthcare finance consulting; other company leaders are experienced in hospital revenue cycles.

"I have clients still doing processes they were doing 20 years ago," he said.

Foster opted against VC and its expectation of exponential growth. Etyon grows by software subscription fees; the goal is to top \$100 million.

Etyon uses "heavy machine learning" to crunch massive datasets in hospital revenue cycle, augmented by consultants. Olive worked in a different use of AI, robotic process automation, and resold white-labeled Etyon software for clients to fill gaps.

"For a while it was a really good joint partnership," Foster said. "When we show up to a meeting, it's one person. They'd show up as a seven-person team."

Olive's marketing department pumped out videos, case studies, blog posts and booklets.

"The end of it for me was when I saw a bus going down Charlotte Avenue in Nashville wrapped in an Olive advertisement," Evans of Hedgeye said. "They had so much money out of venture capital they didn't know what to do with it."

But Olive's marketing started to change minds, Foster said.

"We largely benefit from that now," he said. "(Hospitals) know automation has to be in their journey. ... It takes revenue cycle leaders a long time to change."

What happened at the end?

In 2022, as interest rates spiked, investors started thinking they were overallocated into VC, PitchBook's Harrison said.

Firms couldn't raise new funds and IPOs slowed, so there were fewer returns to pour back into startups. VCs started advising portfolio companies to pursue revenue - and profit.

Meanwhile, calendar 2022 was "the worst financial year for hospitals and health systems since the start of the Covid-19 pandemic," according to consulting firm Kaufman Hall.

Olive cut 450 jobs that July.

"Olive's values of 'choose vision over status quo' and 'act with urgency' drove us to make significant investments across the most pressing parts of healthcare, scale our teams and move quickly to bring solutions to the market," Lane said in an all-staff email. "Our fast-paced growth and lack of focus strained our product and engineering resources and prevented us from executing quickly on key initiatives. I take responsibility for this."

Olive had some 950 hospital clients, said a follow-up statement from the company, and investors supported the turnaround plan.

Cuts included project managers and client services for Etyon's software, so over several months it shifted clients to direct relationships without Olive in the middle.

"We can't have that risk - it will look like our technology is not providing value," Foster said.

Another Drive portfolio company, Root Inc., also hit growing pains. The digital insurer had Ohio's largest-ever IPO in October 2020, then burned cash for a \$521 million net loss in 2021 as the stock plummeted.

In 2022, Root slashed marketing expenses and nearly 500 jobs, then pledged to turn profitable without additional debt or investment. It returned to growth the past two quarters, at a steadier pace, and still has a cash cushion of some \$500 million.

"(Before 2022) there was a lot of advice given to entrepreneurs: 'Grow, grow, grow. Don't worry about profit,'" Root CEO Alex Timm said in an interview. "Now that money isn't free, you're seeing the tide go out on venture capital in a big, big way. We are in many ways lucky - we saw that trend happen early."

Other fallen unicorns this year include Seattle freight network Convoy. Health IT shutdowns include Avail Medsystems in Silicon Valley, the UK's Babylon Holdings and Boston's Pear Therapeutics. VC funding for health IT ticked up this year compared to the nadir in 2022's fourth quarter, according to PitchBook.

In all industries, VC activity is nearing pre-pandemic levels, but deal terms favor venture capitalists more than founders, Harrison said.

"If you're an investor, you have a lot of leverage," Harrison said. "And if you're a startup, things aren't like they were in 2021."

Timm said he admires Lane and the Olive team.

"It's immensely painful and really hard to build a company," Timm said. "There's a million reasons why they don't work.

"They had a great idea. We need more people to run after great ideas, not fewer."

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